

Abstract of the Disclosure

A stepper motor control circuit reduces ripple current by applying both fast and slow current decays to a motor phase when current is being reduced in the motor phase

5 while following a falling current waveform. The control circuit uses an initial fast decay to reduce a winding current and then switches to a slow decay until a winding current is sampled again. The control circuitry samples a winding current and compares the sampled current to a reference current to determine if current is to be applied or reduced using fast and/or slow decay methods. Different phase current sample circuits

10 allow either constant current sensing or selective current sensing.

15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95